DETERMINATION OF SALICIN CONTENT IN FOOD SUPPLEMENTS CONTAINING WILLOW BARK

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Abstract
The medicinal properties of willow bark can be attributed to the presence of salicylic glycosides, mainly salicin and salicortin. Salicin is the metabolic precursor of salicylic acid and has a similar action in the human body. Preparations containing willow bark extract are popular herbal remedies and have been used for anti-inflammatory, anti-rheumatic, antipyretic, antihypertensive, analgesic, antiseptic and astringent properties but many of them are not chemically standardized. The aim of this work was to investigate the presence of salicin in some commercially available food supplements (willow bark for tea, capsules containing willow bark, capsules and tablets containing willow bark extract). Salicin content in six Salix supplements, was quantified through HPLC-DAD analysis. According to the information provided by the manufacturer, only for two of the selected food supplements there is specified the content of salicin. The presence of salicin was monitored at 266 nm. Prior to chromatographic analysis, all products were extracted with methanol for 2 hours under heating and stirring. The highest salicin content was identified in capsules of Salix alba extract from Rotta Natura.

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